

Montana Fish, Wildlife & Parks

SPECIFICATIONS FOR WORK SPECIAL PROVISIONS

Contents:

1. Project Description
2. Project Related Contracts
3. Site Inspection
4. Project Representative, Inspections, and Testing
5. Engineering Interpretations
6. Rejected Work
7. Construction Safety
8. Stored Materials
9. Security
10. Cleanup
11. Sanitary Facilities
12. Use of Premises
13. Measurement and Payment
14. Description of Individual Bid Items

1. PROJECT DESCRIPTION

The Project involves construction work associated with:

**Bannack State Park – Hendricks Mill Building Roofing
Fish, Wildlife & Parks (FWP) project # 7136327
Located in Beaverhead County, MT**

The site is accessed by traveling on Interstate 15 approximately 2.5 miles south of Dillon, MT to the Highway 278 exit no. 59, then 17.3 miles west on Highway 278. Turn left on Bannack Bench Road and proceed 2.9 miles. Turn left onto Bannack road, proceed 0.6 miles, and turn right at wye. Proceed 0.5 miles to the Hendricks Mill building located on right.

The project generally includes tear-off and disposal of existing roofing materials, installation of new sheathing and a multi-ply rolled roofing system, and incidentals necessary to implement the Work.

2. PROJECT RELATED CONTACTS

Project contacts are designated as follows:

Owner:

Montana FWP
1420 E. Sixth Ave.
PO Box 200701
Helena, MT 59620-0701

FWP Project Representative:

Jon Maxwell, P.E.
FWP Project Manager
1522 9th Avenue
Helena, MT 59620
406-841-4002 (office)
406-841-4004 (fax)
jomaxwell@mt.gov

3. SITE INSPECTION

All Bidders should satisfy themselves as to the construction conditions by personal examination of the site described in this document. Bidders are encouraged to make any - investigations necessary to assess the nature of the construction and the difficulties to be encountered, see General Conditions, Article 3.

4. PROJECT REPRESENTATIVE, INSPECTIONS, AND TESTING

The Contractor's work will be periodically tested and observed to insure compliance with the Contract Documents. Complete payment will not be made until the Contractor has demonstrated that the work is complete and has been performed as required. If the Project Representative detects a discrepancy between the work and the requirements of the Contract Documents at any time, up to and including final inspection, such work will not be completely paid for until the Contractor has corrected the deficiency, see General Conditions, Article 9.

The Project Representative will periodically monitor the construction of work to determine if the work is being performed in accordance with the contract requirements. The Project Representative does not have the authority or means to control the Contractor's methods of construction. It is, therefore, the Contractor's responsibility to utilize all methods, equipment, personnel, and other means necessary to assure that the work is installed in compliance with the Drawings and Specifications, and laws and regulations applicable to the work. Any discrepancies noted shall be brought to the Contractor's attention, who shall immediately correct the discrepancy. Failure of the Project Representative to detect a discrepancy will not relieve the Contractor of his ultimate responsibility to perform the work as required, see General Conditions, Article 3.

The Contractor shall inspect the work as it is being performed. Any deviation from the Contract requirements shall be immediately corrected. Prior to any scheduled observation by the Project Representative, the Contractor shall again inspect the work and certify to the Project Representative that he has inspected the work and it meets the requirements of the Contract Documents. The Project Representative may require uncovering of work to verify the work was installed according to the contract documents, see General Conditions, Article 12.

The work will be subject to review by the Project Representative. The results of all such observations, and all contract administration, shall be directed to the Contractor only through the Project Representative.

4.1 Services Required by the Contractor. The Contractor shall provide the following services:

- a. Any field surveys to establish locations, elevations, and alignments as stipulated on the Contract Documents. FWP reserves the right to set preliminary construction staking for the project. The Contractor is responsible to notify FWP for any construction staking discrepancies.
- b. Preparation and certification of all required shop drawings and submittals as described in the General Conditions, Article 3.
- c. All testing requiring the services of a laboratory to determine compliance with the Contract Documents shall be performed by an independent commercial testing laboratory acceptable to the Project Representative. The laboratory shall be staffed with experienced technicians properly equipped, and fully qualified to perform the

tests in accordance with the specified standards.

- d. Preparation and submittal of a construction schedule, including submittals, see General Conditions, Article 3. The schedule shall be updated as required, as defined in the Contract Documents.
- e. All Quality Control testing as required by the Contractor's internal policies.
- f. All Quality Assurance testing and/or re-testing as stated in the Contract Documents, see General Conditions, Article 13.

4.2 Services Provided by the Owner. The Owner shall provide the following services at no cost to the Contractor except as required for retests as defined in the Contract Documents.

- a. The Project Representative may check compaction of backfill and surfacing courses using laboratory testing submittal information supplied by the Contractor. These tests are to determine if compaction requirements are being fulfilled in accordance with the Contract Documents. It is ultimately the responsibility of the Contractor to insure that this level of compaction is constant and met in all locations.
- b. Any additional Quality Assurance testing deemed appropriate by the Owner, at the Owner's expense.

5. ENGINEERING INTERPRETATIONS

Timely Engineering decisions on construction activities or results have an important bearing on the Contractor's schedule. When engineering interpretation affects a plan design or specifications change, it should be realized that more than 24 hours may be required to gain the necessary Owner participation in the decision process including time for formal work directive, or change order preparation as required.

6. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to the expiration of the warranty period, shall be removed and replaced with work or materials conforming to the provisions of the Contract Documents, see General Conditions, Article 12. Failure on the part of the Project Representative to condemn or reject bad or inferior work, or to note nonconforming materials or equipment on the Contractors submittals, shall not be construed to imply acceptance of such work. The Owner shall reserve and retain all its rights and remedies at law against the Contractor and its Surety for correction of any and all latent defects discovered after the guarantee period (MCA 27-2-208).

Only the Project Representative will have the authority to reject work which does not conform to the Contract Documents.

7. CONSTRUCTION SAFETY

The Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees and subcontractors) and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve them from compliance with the obligations and penalties set forth therein, see General Conditions, Article 10.

8. STORED MATERIALS

Contractor shall use an approved storage area for materials. Materials and/or equipment purchased by the Contractor may be compensated on a monthly basis. For compensation, provide the Project Representative invoices for said materials, shop drawings and/or submittals for approval, and applicable insurance coverage, see General Conditions, Article 9.

9. SECURITY

The Contractor shall provide all security measures necessary to assure the protection of equipment, materials in storage, completed work, and the project in general.

10. CLEANUP

Cleanup for each item of work shall be fully completed and accepted before the item is considered final. If the Contractor fails to perform cleanup within a timely manner the Owner reserves the right to withhold final payment.

11. SANITARY FACILITIES

Provide on-site toilet facilities for employees of Contractor and Sub-Contractors and maintain in a sanitary condition.

12. USE OF PREMISES

Camping on-site at approved areas may be allowed at the discretion of the Park Manager. No services or facilities will be provided. No camping will be allowed in fee campground areas.

13. MEASUREMENT AND PAYMENT

Review these Contract Documents for additional Measurement and Payment specifications for definitions. Quantities are listed on the Bid Proposal for Payment Items. Additional material quantities, volumes, and measurements may be shown on the Contract Document drawings and/or specifications.

Unit Price quantities and measurements shown on the Bid Proposal are for bidding and contract purpose only. Quantities and measurements supplied, completed for the project, and verified by the Project Representative shall determine payment. Each unit price will be deemed to include an amount considered by the Contractor to be adequate to cover Contractor's overhead and profit for each bid item.

The Owner or Contractor may make a Claim for an adjustment in Contract Unit Price if the quantity of any item of Unit Price Work performed by the Contractor differs materially and/or significantly (increase or decrease by 50%) from the estimated quantity indicated on the Bid Proposal.

Lump sum bid item quantities will not be measured. Payment for these lump sum bid proposal items will be paid in full amount listed on the Bid Proposal when accepted by the Project Representative, unless specified otherwise.

14. DESCRIPTION OF INDIVIDUAL BID ITEMS

Work includes furnishing all labor, equipment, materials and incidentals to tear-off and dispose of existing roofing materials, install new sheathing, and a multi-ply rolled roofing system.

14.1 Bid Item 1: Roof Replacement – 2 ply System

The existing roofing system was installed circa 1986, consisting of new sheathing installed over pre-existing roof planking and rolled roofing remnants (see attached Photo Logs). New rolled roofing materials with batten boards were installed over the sheathing. These materials have severely deteriorated and require tear-off prior to installation of the new roofing system.

- A. Tear-off existing materials above the original roof planking, including batten boards, rolled roofing membranes, flashing, sheathing, and remnants of pre-existing roofing materials. Use care to ensure the original roof planking and building structure are not damaged during tear-off. **Due to the historical significance of the building, alteration of any portion of the structure below the existing sheathing will not be allowed without approval of Engineer.** Notify Engineer immediately upon discovery of any circumstance that prevents proper installation of the new roofing system. Dispose of all materials at a licensed landfill or waste transfer facility.

Historical aviation markings are present on remnants of the pre-existing roofing materials that are in place below the existing sheathing. These historical markings must be documented and/or salvaged by Owner prior to removal. Use care while removing sheathing to prevent damage to aviation markings until Owner has completed documentation and/or salvage.

Due to the historical nature of the site, avoid disturbance of areas surrounding the structure. Limit disturbance to only that which is necessary to access the site and complete the Work. Any disturbance of vegetation, debris or earth shall be approved by Owner.

- B.** Install new sheathing over original roof planking in accordance with recommendations published by the Engineered Wood Association (formerly American Plywood Association [APA]). Furnish minimum 15/32" 4-ply exterior grade plywood sheathing. Use Common Ring Shank nails (or approved fastener) spaced 6 inches on-center (O.C.) at panel edges supported by roof framing and 12 inches O.C. in the panel field along intermediate framing supports. Utilize fasteners of sufficient length to penetrate planking and anchor into underlying framing supports a minimum of 1-inch. **Fasteners shall not protrude beneath the underside of the existing roof planking between framing supports.** Supplemental fasteners driven between framing supports shall be of appropriate length to anchor sheathing and prevent protrusion.
- C.** Install a 2-ply Self-Adhering (SA) Styrene-Butadiene-Styrene (SBS) Modified Bitumen roof system consisting of a Mechanically Attached (MA) base sheet and SA cap sheet. Furnish products manufactured by one of the following (or approved equal):
 - a. Certainteed**
Specification: SA-N-2-S (attached)
Base Sheet: Flintlastic® SA Nailbase
Cap Sheet: Flintlastic® SA Cap (color: Colonial Slate)
Refer to the Commercial Roof Systems Manual at <http://www.certainteed.com/> for installation instructions.
 - b. GAF**
Specification: N-1-1-LC (attached)
Base Sheet: Liberty™ MA Base Sheet
Cap Sheet: Liberty™ SBS SA Cap Sheet (color: Slate)
Refer to the Application and Specification Manual at <http://www.gaf.com/> for installation instructions.

Incidental products such as primer and adhesive shall be as recommended by the manufacturer.

All metal work, such as drip edge and counter-flashing, shall be minimum 24 gauge plain, unfinished, or weathering steel.

Mechanically Attached base sheets shall be secured using ring shank nails with minimum 1-inch diameter integral head, or standard ring shank nails (or approved fastener) driven through minimum 1-inch diameter metal caps at the spacing pattern recommended by the manufacturer. **Fasteners shall not protrude beneath the underside of the existing roof planking.**

Any requests for product substitutions in place of the above specified materials must be received by the Engineer at least ten (10) calendar days prior to the date of the bid opening in order to be considered, as stated in the Instructions to Bidders, Paragraph 3.1.

Submit documentation of all proposed materials to Owner for approval prior to beginning Work.

Self-Adhering membranes shall not be applied at temperatures below 60° Fahrenheit. Follow all manufacturers' recommendations, such as those specified for back-nailing, overlapping, and flashing for walls and roof penetrations, including the use of cant strips and membrane materials for base flashing. Notify Owner in advance of special circumstances which may require consultation with the manufacturer for proper installation instructions.

14.2 Bid Item 1a: Installation of Interply Sheet for 3-ply system

Install a Self-Adhering interply sheet following installation of the MA base sheet and prior to applying the SA cap sheet described in Bid Item 1. Furnish products manufactured by one of the following (or approved equal):

a. Certainteed

Specification: SA-N-3-S (attached)

Interply Sheet: Flintlastic® SA MidPly

b. GAF

Specification: N-1-2-LC (attached)

Interply Sheet: Liberty™ SBS SA Base/Ply Sheet

Follow all manufacturers' recommendations for installation of the interply sheet to meet the above specifications for a 3-ply system.